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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/533,754	Applicant(s) LEURS ET AL.
	Examiner GERARDO ARAQUE JR	Art Unit 3689

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 02 February 2011.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-21 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-21 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date _____
- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date _____
- 5) Notice of Informal Patent Application
- 6) Other: _____

DETAILED ACTION

STATUS OF CLAIMS

1. **Claims 1, 19, and 20 have been amended.**
2. **No claims have been cancelled or added.**

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. **Claims 1 – 11, 15 – 19, and 20 – 21** are rejected under 35 U.S.C. 102(e) as being anticipated by **Hane (US PGPub 2004/0083490 A1)**.
3. In regards to **claims 1 and 19**, Hane discloses a method of analyzing a plurality of content items by a processing apparatus for enabling viewing of the analyzed content by at least one user, and providing a recommendation of the content items preferred by the at least one user and a computer readable storage medium comprising a computer program including a set of instructions executable by a processor, the set of instructions being operable to be received by the processor for configuring the processor to receive and analyze a plurality of content items for viewing by a user, and for configuring the processor to provide a recommendation of the content items preferred by the user, the method performed by the processing apparatus and program comprising:

determining a user preference profile for a user (**Page 1 ¶ 13 wherein a profile creator is used to create a user preference profile**);

receiving a plurality of content items (**see at least Page 1 ¶ 14, 17; Page 4 ¶ 94 wherein the apparatus receives a plurality of content items and analyzes the received programs in order to determine which programs a user may view based on stored information within the user's profile**);

setting a preference value for each received content item high (**see at least Page 1 ¶ 19 – 22; Page 2 ¶ 28 – 31 wherein preferences are established by requiring the user to create one or more profiles and providing keywords that the user prefers to be included in program, thereby establishing a preference value for each content item that the apparatus receives in order to determine which program a user may be interested in viewing**),

if the content item correlates with the user preference profile; and recommending to the user the content item having the preference value set high, (see at least Page 3 ¶ 68 wherein a program is searched for a recommended based on the user preference profile; see at least Page 6 ¶ 141; Page 7 ¶ 148 wherein programs that correlate with the user profile and have a high preference value are provided to the user and wherein the high preference value is determined based on how well the program correlates with the user preference profile); and

if the preference value is not set high, recommending the content item having at least one first characteristic with an associative correspondence to at least one second characteristic of at least one previously received content item having the user

preference set high (see at least Page 6 ¶ 140; Page 7 ¶ 148 wherein programs that are not ranked high when initially correlated with the user preference profile are reanalyzed in order to determine whether the program should continue to be recommended to the user based on various stored parameters [characteristics], including previous programs that have been stored/viewed and wherein the system is a learning system that takes into account other recommended programs descriptions in order to determine other programs that a user may enjoy, i.e. if a program that does not have a high value is identified the system recommend the program if it has a characteristic that has an associative correspondence with a program that the user has marked with a high score (liked the program); see also for additional reference regarding how the recommendation system/learning system works Page 4 ¶ 93 – Page 6 ¶ 132 wherein Hane discusses how the recommendation system allows for the system to extract information from the shows that the user enjoyed and uses this information in order to determine other shows that the use may enjoy as well. In other words, Hane discloses that the user initially inputs their parameters and the recommendation system begins to learn on the user's likes and dislikes. As the user watches more shows, the system begins to take information from these shows and applies them to other shows and recommends those shows to the user. That is to say, the system relates characteristics from one program to characteristics of another program.

Moreover, the system also provides a ranking of these programs ranging from highly probable that the user may watch to less probable. In other words, one of ordinary skill in the art would have recognized that the system is providing a ranking system according to a user's profile and determining the relevance that each program has according to the information that is stored in the user profile.

As a result, a highly ranked program would contain all, if not most, of the user's characteristics, while the lower rank characteristics would contain very few characteristics that are shown in the higher ranked programs. In other words, the system provides the lower ranked programs because the system may have determined that they share specific characteristics amongst the higher ranked programs.

Although, Hane does disclose that the user provides specific parameters, Hane also discloses that the system expands on these parameters based on programs that the user may have shown some interest in. As a result, since the system is expanding and extracting keywords from previous programs the system is, indeed, relating, "...characteristics of one program to characteristics of another program."

To be even more specific, the Examiner will now provide a breakdown of paragraphs 93 – 132 in order to show why all 39 paragraphs are being cited so that the applicant can fully understand the detailed workings of Hane's invention:

¶ 93 – 95 discloses the how the learning user preference is determined by first laying out the groundwork of how the vectors are created;

¶ 96 – 97 discloses the acquisition of the data and what the data is comprised of, e.g. cast, channel, type, brief explanation of the program;

¶ 98 – 101 discloses the analysis that is performed for the acquired data;

¶ 102 discloses that vectors are created based on the analysis

¶ 103 discloses an example of the steps performed above

¶ 104 – 109 discloses how the above steps are performed again for an entire set of programs

¶ 110 - 114 discloses how the system takes into account the plurality various profiles in order to create specific learned preferences

¶ 115 – 128 discloses a more detailed example of the type of analysis that the system performs in order to determine which programs would be best satisfy the user's preference

¶ 129 – 131 discloses how values are used and assigned in order to determine which programs best satisfies the user's preference

¶ 132 discloses how the analyzed information is stored so that it can be used to recommend programs, which is discussed in the next section of Hane).

4. In regards to **claim 2**, Hane discloses wherein the content item is recommended to the user if only a single associative correspondence between the first characteristic and the second characteristic is determined (see at least Page 6 ¶ 140; Page 7 ¶ 148 wherein if a associative correspondence is found the content will be recommended).

5. In regards to **claim 3**, Hane discloses wherein only the associative correspondence is determined for the first characteristic and second characteristic (**see at least Page 1 ¶ 7; Page 2 ¶ 30 wherein the characteristic of why the program is being recommended may be at least because a specific actor appears in the program or keyword**).

6. In regards to **claim 4**, Hane discloses further comprising an act of determining a user preference for the content item recommended from the associative correspondence and updating the user preference profile in response to the user preference (**Page 4 ¶ 94; Page 5 ¶ 113 - 116; Page 6 ¶ 130 wherein the system controller learns from the programs that have been selected to be recorded by the user and uses at least a morpheme analysis, for example, in order to determine various user preferences and is updated**).

7. In regards to **claim 5**, Hane discloses wherein the first characteristic is a description of the content item and the second characteristic is a description of the at least one previously received content item (**see at least Page 4 ¶ 101 wherein the characteristic of the content can be comprised of at least the contents of the program**).

8. In regards to **claim 6**, Hane discloses wherein the content item description is derived from a first textual description associated with the content item and the at least one previously received content item description is derived from a textual description associated with the at least one previously received content item (**see at least Page 4 ¶ 99 wherein a text analysis process is used**).

9. In regards to **claim 7**, Hane discloses wherein the associative correspondence is determined in response to an identification of a correspondence between at least one word of the first textual description and at least one word of the second textual description (**see at least Page 4 ¶ 99 wherein the results of the text analysis process is stored for use in determining a recommendation and uses the stored information, such as the information for the user “favorites”, in order to determine appropriate recommendations**).

10. In regards to **claim 8**, Hane discloses wherein the correspondence is determined in response to the at least one word of the first textual description having a similar meaning as the at least one word of the second textual description (**see at least Page 4 ¶ 98 wherein a morpheme analysis is used in order to use the definition of a word in order to determine the meaning of the explanation regarding each program**).

11. In regards to **claim 9**, Hane discloses wherein the correspondence is determined in response to the at least one word of the first textual description having an associative word correspondence to the at least one word of the second textual description, the associative word correspondence being determined from a database of word associations (**see at least Page 4 ¶ 98 – 99 wherein a word dictionary is used and stored within the system**).

12. In regards to **claim 10**, Hane discloses wherein the associative correspondence is determined in response to word combinations of at least one of the first and second textual descriptions (**Page 4 ¶ 97 – 99 wherein brief explanations of the programs is**

used and stored into the system in order to determine the associative correspondence of the content items).

13. In regards to **claim 11**, Hane discloses wherein at least one of the first and second characteristics are determined from content analysis of the first and second content items (**Page 4 ¶ 97 – 99; Page 4 ¶ 101 wherein the system uses at least the contents of the program(s) and brief descriptions in determining the recommendation; see also the explanation provided under claim 1 regarding the last limitation of the claim**).

14. In regards to **claim 15**, Hane discloses wherein at least one of the first and second characteristics are determined from a content broadcast channel (**Page 4 ¶ 97 wherein the characteristics can be derived from at least the channel of the program**).

15. In regards to **claim 16**, Hane discloses wherein the act of determining the associative correspondence comprises determining a plurality of associative correspondences between a plurality of characteristics of the content item and a plurality of characteristics of the at least one previously received content item (**see at least Page 4 ¶ 101 wherein the characteristics used can be comprised of the program title, cast of the program, type of the program, and contents of the program**).

16. In regards to **claim 17**, Hane discloses wherein the associative correspondence is further determined in response to a previous associative correspondence between content items (**see at least Page 4 ¶ 87; Page 5 ¶ 109, 115 wherein the system uses**

information from user favorite programs in order to determine the associative correspondence for recommending programs).

17. In regards to **claim 18**, Hane discloses wherein at least one of the first and second characteristics are selected from at least one of (**see at least Page 4 ¶ 101 wherein the cast of the program is used**):

- a. an actor,
- b. a character played by an actor, and
- c. a location.

18. In regards to **claims 20**, Hane discloses a processing apparatus (**Page 1 ¶ 24**) comprising a recommender for providing a recommendation of content to a user, as discussed above. Hane further discloses a processor, receiver for receiving input, and a display for displaying the recommendation (**see at least Page 1 ¶ 14, 17; Page 4 ¶ 94; Page 7 ¶ 150 wherein the apparatus receives a plurality of content items and analyzes the received programs in order to determine which programs a user may view based on stored information within the user's profile and display it to the user**).

In other words, Hane discloses a processing apparatus for receiving and analyzing a plurality of content items and providing a recommendation of content items preferred by a user.

Regarding the following limitations:

a receiver for receiving a plurality of content items;

a processor **for** determining a user preference profile for a user, and setting a preference value high

if the first content item correlates with the user preference profile; and

a display for

recommending to a user the content item having the preference value set high,
and

if the high preference value is not set high, recommending the content item
having at least one first characteristic with an associative correspondence to at least
one second characteristic of at least one previously received content item having the
user preference set high;

the Examiner considers them to be nonfunctional descriptive subject matter.
Specifically, the Examiner understands the claims to be directed towards a system and
apparatus and, consequently, the data that is being processed does not add any further
structural components to the claim. In other words, the type of data adds little, if
anything, to the claim's structure, and, thus, does not serve as a limitation on the claims
to distinguish over the prior art.

As a further note a recitation of the intended use of the claimed invention must
result in a structural difference between the claimed invention and the prior art in order
to patentably distinguish the claimed invention from the prior art. If the prior art
structure is capable of performing the intended use, then it meets the claim.

NOTE: Although the Examiner has treated the user profile processor, receiver,
and recommender processor as structural elements of the processing apparatus, the

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Examiner asserts that this was done as a means of expediting prosecution. The Examiner refers the applicant to the rejection under 35 USC 101 where the Examiner has stated that these components are actually software modules.

19. In regards to **claims 21, the combination of Hane** discloses wherein the processor, receiver, and display are included in a video recorder (**see at least Page 1 ¶ 24 wherein the processing apparatus and video recorder are part of the same apparatus/system**).

Claim Rejections - 35 USC § 103

20. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

21. **Claims 12 – 14** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hane (**US PGPub 2004/0083490 A1**) in view of **Nicky Blackburn (Innovations; [Daily Edition])**.

22. In regards to **claims 12 – 14, Hane** discloses a system and method which analyzes the content of a program and uses the extracted information in order to determine whether the program should be recommended to the user based on stored information.

However, **Hane** fails to explicitly disclose:

wherein the content analysis comprises a video image analysis, an audio analysis, and content video object analysis of each of the plurality of the content items.

Blackburn discloses that it is old and well known use video and audio analysis as a means of comparing the captured data with information stored within the system in order to provide key information to a user.

It would have been obvious to one having ordinary skill in the art to include in the recommendation system and method of **Hane** the ability to capture video and audio as a means of analyzing content as taught by **Blackburn** since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

Response to Arguments

23. Applicant's arguments filed **2/2/2011** have been fully considered but they are not persuasive.

Rejection under 35 USC 112

24. The rejection under 35 USC 112, second paragraph, has been **withdrawn** due to amendments.

Rejection under 35 USC 102

25. Applicant argues that **Hane** fails to disclose:

"if the preference value is not set high, recommending the content item having at least one first characteristic with an associative correspondence to At least one second characteristic of at least on previously received content item having the user preference set high."

To be more specific, the applicant argues:

"In accordance with this recitation, the present system provides for recommending a non-preferred content item having some characteristic in common with one other preferred content item. Note that in accordance with the present system, the selection is not performed based on the user characteristic but rather only on some mutual characteristic between the preferred and non-preferred content items."

However, the Examiner respectfully disagrees.

First, the Examiner disagrees with the applicant's argument that the selection is not performed based on the user characteristic. To be more specific, the Examiner asserts that the selection is based, at least indirectly, with the user's characteristic because the preferred content item was selected because it was based on the user's characteristic. As a result, the Examiner asserts that the user's characteristic does play some role in selecting the non-preferred item because the content item that it is being compared with, i.e. preferred content item, was originally based on the user's characteristic.

Second, as discussed in the rejection above, **Hane** provides a system and method wherein a user inputs specific parameters so that the recommendation system is allowed to determine which programs to recommend to a user. However, **Hane** continues on to disclose that the recommendation system is a learning system (**see at least Pages 4 – 6 ¶ 83, 89, 93 – 132**). **Hane** discloses that the system extracts information from the program as a means of categorizing the program. The

system continues on to use the extracted information (keywords) from a selected program and determines if the extracted information is part of the user's profile. If the system determines that the keywords are not part of the user's profile library it continues on to registering the keyword and making it a part of the user's profile (see also Page 4 ¶ 93 – Page 6 ¶ 132 wherein Hane discusses how the recommendation system allows for the system to extract information from the shows that the user enjoyed and uses this information in order to determine other shows that the user may enjoy as well.). In other words, Hane discloses that the user initially inputs their parameters and the recommendation system begins to learn the user's likes and dislikes. As the user watches more shows, the system begins to take information from these shows and applies them to other shows and recommends those shows to the user.

Once this has been established, the system refers back to the newly updated user profile and provides further recommendations on programs that the user may watch. In other words, Hane discloses extracting keywords (characteristics) of one program, storing it in the user's profile, and using the newly updated user profile to determine whether specific characteristics show up in another program in order to recommend it to the user. That is to say, the system relates characteristics of one program to characteristics of another program.

Moreover, the system also provides a ranking of these programs ranging from highly probable that the user may watch to less probable. In other words, one of ordinary skill in the art would have recognized that the system is providing a ranking

system according to a user's profile and determining the relevance that each program has according to the information that is stored in the user profile.

As a result, a highly ranked program would contain all, if not most, of the user's characteristics, while the lower rank characteristics would contain very few characteristics that are shown in the higher ranked programs. In other words, the system provides the lower ranked programs because the system may have determined that they share specific characteristics amongst the higher ranked programs.

Although, **Hane** does disclose that the user provides specific parameters, **Hane discloses that the system expands on these parameters based on programs that the user may have shown some interest in. As a result, since the system is expanding and extracting keywords from previous programs the system is, indeed, relating, "...characteristics of one program to characteristics of another program."**

The Examiner would also like to note that the reason for providing a lengthy citation, i.e. citing ¶ 93 – 132, is because **Hane** provides a detailed breakdown of the recommendation and comparison process. The Examiner felt that citing only portions of the above mentioned citation would have been confusing and would have resulted in not fully understanding why **Hane** anticipates the claimed invention. For example:

¶ 93 – 95 discloses the how the learning user preference is determined by first laying out the groundwork of how the vectors are created;

¶ 96 – 97 discloses the acquisition of the data and what the data is comprised of, e.g. cast, channel, type, brief explanation of the program;

¶ 98 – 101 discloses the analysis that is performed for the acquired data;

¶ 102 discloses that vectors are created based on the analysis

¶ 103 discloses an example of the steps performed above

¶ 104 – 109 discloses how the above steps are performed again for an entire set of programs

¶ 110 - 114 discloses how the system takes into account the plurality various profiles in order to create specific learned preferences

¶ 115 – 128 discloses a more detailed example of the type of analysis that the system performs in order to determine which programs would be best satisfy the user's preference

¶ 129 – 131 discloses how values are used and assigned in order to determine which programs best satisfies the user's preference

¶ 132 discloses how the analyzed information is stored so that it can be used to recommend programs, which is discussed in the next section of **Hane**

As a result, the Examiner once again asserts that merely pointing to one paragraph of the prior art would be very difficult since the manner in which the disclosure has been presented requires all of the cited paragraphs to be presented. In other words, citing only 1 or 2 paragraphs to reject the claimed limitation would not accurately represent how **Hane's** invention is carried out and would not fully disclose how **Hane** does, indeed, disclose, "if the preference value is not set high,

recommending the content item having at least one first characteristic with an associative correspondence to At least one second characteristic of at least on previously received content item having the user preference set high."

Conclusion

26. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GERARDO ARAQUE JR whose telephone number is (571)272-3747. The examiner can normally be reached on Monday - Friday 9:30AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janice Mooneyham can be reached on (571) 272-6805. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Gerardo Araque Jr./
Examiner, Art Unit 3689
3/19/2011